





Honey Facts

Honey is "manufactured" in one of the most efficient factories in the world, the beehive. A bee will travel several thousand miles and visit more than two million flowers just to gather enough nectar to make one pound of honey.

The color and flavor of honey depends on the kinds of blossoms the nectar was gathered from. In fact, there are over 300 kinds of honey in the United States alone. Generally, light colored honey has a mild flavor, while darker honey is more robust.

Honey is composed of fructose, glucose, and water. It also contains other sugars, a few trace enzymes, minerals, vitamins and amino acids.

In addition to gathering nectar to make honey, bees perform the essential service of pollination, or fertilization, of a flowering plant. It cours when pollen is transferred from the anthers of a flower to the oxules of that or another flower. Bees pollinate a variety of fruits, vegetables, legumes, and more. Thirty percent of the human diet comes from insect pollinated plants. Honey-bees are responsible for about eighty percent of this pollination.

Forms of Honey

Honey comes in many delicious forms:

-Liquid

Free of visible crystals, liquid honey is extracted from the comb by centrifugal force, gravity, or straining. Because liquid honey mixes easily into a variety of foods, it is especially convenient for cooking and baking. Most of the honey produced in the United States is sold in liquid form.

-Comb

Comb honey is honey that comes as it was produced--in the waxy comb. The comb, as well as the honey, is edible!

-Cut Comb

Cut comb honey is honey that has been packaged with chunks of the honey comb.

-Whipped (or cremed)

While all honey will crystallize in time, whipped honey (also known as cremed honey, sugared honey, or spun honey) is brought to market in a crystallized state. This crystallization is controlled so that, at room temperature, the honey can be spread like butter. In many countries around the world, whipped honey is preferred to the liquid form.

Cooking With Honey

For best results, use recipes developed for honey. When substituting honey for granulated sugar, begin by substituting honey for up to half of the sugar called for in the recipe. With a little experimentation, honey can replace all of the sugar in some recipes.

When baking with honey, please remember:

- -Reduce any liquid called for by 1/4 cup for each cup of honey used.
- -Add 1/2 tsp. baking soda for each cup of honey used.
- -Reduce oven temperature by 25 degrees to prevent over-browning.

Because of the high fructose content, honey has more sweetening power than sugar. This means that you can use less honey to achieve the same desired sweetness.

When using honey, coat the measuring cup with non-stick cooking spray or vegetable oil before adding the honey. The honey will slide right out.

A 12 ounce jar of honey equals a standard measuring cup.

Storing Honey

Store honey at room temperature--your kitchen counter or pantry shelf is ideal.

Storing honey in the refrigerator accelerates the honey's crystallization. Crystallization is the natural process in which liquid honey turns into a solid.

If your honey crystallizes, simply place the jar in a warm water bath and stir or heat in a microwave safe container with the lid off until the crystals dissolve. Be careful not to boil or scorch the honey.

Note Honey should not be fed to infants under one year of age. Honey is a safe and wholesome food for children and adults.

Honey Recipes

French Dressing

1/3 cup oil
1/4 cup vinegar
1/4 cup honey
1 tsp. salt
1/2 tsp. paprika
2 Tbsp. minced onion
1/2 cup ketchup

Pour ingredients into bottle and shake well.

Honey Baked Beans

1 lb. can baked beans 2 Tbsp. sausage cooked with 1/2 small onion 1 tsp. prepared mustard 2 Tbsp. ketchup 3-4 Tbsp. honey to taste

Mix ingredients, put in 2-quart casserole dish, and bake at 350 degrees.

Honey Crispies

1/2 cup powdered sugar1/2 cup honey1/2 cup peanut butter1 1/2 cups crispy rice cereal1/2 cup raisins1/2 cup chocolate or multi colored sprinkles

Place a sheet of waxed paper on a cookie sheet so cookies don't stick. Combine powdered sugar, honey and peanut butter in a medium bowl. Stir until mixed well. Stir in cereal and raisins. Using hands, shape mixture into 1-inch balls. Roll balls in sprinkles and place on cookie sheet. Refrigerate for 1 hour. Cookies should feel firm when touched. Serve immediately or store in an airtight container in the refrigerator.

Super Fast Snacks

- -Drizzle honey over fresh grapefruit halves. Microwave 1 to 2 minutes until warm.
- -Mix 1/2 cup peanut butter with 1/2 cup honey. Use as dip for carrot or celery sticks, and pear or apple slices.
- -Toast English muffins and spread with cream cheese. Top with slivered almonds and drizzle with warm honey.
- -Microwave honey in a small microwave safe bowl or pitcher for 15 to 30 seconds. Pour warm honey over toaster waffles, fresh slices of apples or berries.

Honey BBQ Shredded Pork

1 park shoulder or picnic roast (with visible fat removed) or 3-4 lbs. turkey legs

- 1 1/4 cups ketchup
- 1/2 water
- 1/2 cup honey
- 1 cup chopped celery
- 1 cup chopped onion
- 2 Tosp. lemon juice
- 3 Tosp. white vinegar
- 3 Tosp. worchestershire sauce
- 2 Tosp. dry mustard
- 1 tsp. salt
- 1/2 tsp. ground black pepper
- 8-10 crusty rolls or flour tortillas

In a 9 x 13 pan combine all ingredients. Cover with foil and roast at 300 degrees for 3 to 3 1/2 hours. Shred meat using two forks, removing all bones and skin. Stir with sauce. Serve in crusty rolls or warmed flour tortillas. Yields 8 to 10 servings.

Homemade Honey Beauty Recipes

Honey Cleansing Scrub--Mix 1 Tbsp.

honey with 2 Tbsp. finely ground almonds and 1/2 tsp. lemon juice. Rub gently onto face. Rinse well with warm water.

Facial Toner--In blender, puree 1 Tbsp. honey with a peeled, cored apple. Smooth over face, leaving on for 15 minutes. Rinse with cool water.

Moisture Mask--Mix 2 Tbsp. honey with 2 tsp. milk. Smooth over face and throat. Leave on 10 minutes. Rinse off with warm water.

Hair Conditioner -- Mix 1/2 cup honey and 1/4 cup olive oil. (Use 2 Tosp. oil for normal hair) Work small amount at a time through hair until coated. Cover hair with a shower cap and leave on for 30 minutes. Remove cap, shampoo well and rinse. Dry as usual.

Central Region: Benton, Boone, Callaway, Camden, Cole, Cooper, Dallas, Hickory, Howard, Laclede, Maries, Miller, Moniteau, Morgan, Osage, Pettis, Phelps, Polk, Pulaski, Saline

CountrySide Apiaries

Jesse and Doris Lyons
8209 Dusty Rhodes Lane
Columbia, MO 65202
(573) 474-8527 hm
(573) 882-0247 wk
LyonsJ@missouri.edu

Products: Extracted honey

Gibbons Bee Farm

Sharon Gibbons
561 South HWY O
Rocheport, MO 65279
(573) 446-0447 phone
(636) 256-0303 fax
SGIBB314@earthlink.net
www.gibbonsbeefarm.com
Products: Liquid, Comb and Flavored honey,
beeswax, candles

Missouri Monte Carlo Honey

Rosemary Scheppers 1685 State HWY 94 Holts Summit, MO 65043 (573) 635-9929 cas@socket.net

Products: Liquid & Comb honey

Piazza Farms

George Piazza 21430 State Route KK St. James, MO 65559 (573) 265-8353

Products: Honey

Central cont.

Walk-About Acres

Art and Vera Gelder 6800 N. Kircher Road Columbia, MO 65202 (573) 474-8837 phone/fax Walkabot@midamerica.net

Products: Liquid & Comb honey, beeswax, candles, beekeeping supplies, and swarm control services

AgriTourism: farm tours, gift shop, greenhouses, gardens, and petting zoo

East Region: Crawford, Franklin, Gasconade, Jefferson, Lincoln, Montgomery, Perry, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Warren, Washington

Buxton Honey Farm

James and Kathy Buxton
5197 HH HWY
Catawissa, MO 63015-1711
(636) 274-2096
j.khoneybee2@netzero.com
Products: Liquid, Comb, and Creme honey,
honey sticks

Femme Osage Apiary

Ian and Pam Brown
1407 Sneak Road
Foristell, MO 63348
(636) 398-5014
Products: Liquid honey, gift baskets, bees, beekeeping supplies, and pollimation services

Hart Apiaries

Troy Hart
3738 HWY 47
Lonedell, MO 63060
(636) 629-5814
beeschartapiaries.com
www.hartapiaries.com
Products: Liquid, Comb, and Creme honey,
and Bee Pollen

Hickory Wind Apiary

Tim and Jodi Hendrickson Box 4850 Walmar Road Barnhart, MO 63012 (636) 942-2043

hendrickson@jcn.net

Products: Liquid & Comb honey Special Note: Available as speaker for garden clubs, civic groups, etc. Also teaches beekeeping classes at Missouri Botanical Gardens and local junior college

Jansen Apiaries

Ted Jansen
9 West Drive
Chesterfield, MO 63017-0720
(636) 532-3372
mfj824@aol.com

Products: Honey, beeswax, bees, nucs, and queens

Moser's Apiary

Scott Moser
6600 Davis Lane
Cedar Hill, MO 63016
(636) 285-7295 phone
(816) 241-2025 fax
smoser@ruralcom.net
Products: Liquid, Comb, and Creme honey,

beeswax candles, swarm retrival, and nucs

Rombach Farms Pumpkin Patch

Steve Rombach 18639 Olive Street Chesterfield, MO 63005 (636) 532-7625

Products: Comb honey & Honey sticks

The keeping of bees is known as apiculture.

East cont.

Whip Haven Farm Ginny and Rex Whipple 9335 Little Bourbeuse Road Sullivan, MO 63080

(573) 627-2100 Products: Honey

rioddecs. Herey

Wind Ridge Farm

Carole Shortt

3511 HWY F

PO Box 186

New Melle, MO 63365

(636) 398-8181

cshortt@mail.win.org

www.windridgefarm.net

Products: Honey

North Central: Adair, Carroll, Chariton,

Grundy, Linn, Livingston, Macon,

Mercer, Putnam, Randolph, Schuyler,

Sullivan

Hollenbeck Honey Farm LLC

3001 Spencer Lane

Kirksville, MO 63501

(660) 665-2542

Products: Honey

King Hill Farms

Paul Manson

Rural Route 3 Box 66

Brunswick, MO 65236

(660) 548-3972

Products: Honey

Bees are the only insects that make food for humans.

In her lifetime, a worker honey bee makes only 1/12 tsp. of honey.

Northeast: Audrain, Clark, Knox, Lewis, Marion, Monroe, Pike, Ralls, Scotland, Shelby

Binder's Hilltop Apple & Berry Farm

Sandy Binder
24688 Audrain Road #820
Mexico, MO 65265
(573) 581-0088
(573) 581-1415
apples&alpacas@ktis.net
Products: Liquid & Comb honey

Sandhill Farms

Stan Hildebrand
Rural Route 1 Box 155
Rutledge, MO 63563
(660) 883-5543 phone
(660) 883-5545 fax
sandhill@ic.org
Products: Honey

Northwest: Andrew, Atchison, Buchanan, Caldwell, Clay, Clinton, Daviess, DeKalb, Gentry, Harrison, Holt, Nodaway, Platte, Ray, Worth

Bud's Busy Bees

C.R. Bud Motsinger
3629 Northeast State Route U
Hamilton, MO 64644
(816) 583-4898
motsing@cameron.net
Products: Liquid honey

Fisher's Bee Supplies

Ed and Jean Fisher 4005 NE 132nd Street Smithville, MO 64089 (816) 532-4698

Products: Honey, bees, and hive supplies

South Central: Bollinger, Carter, Dent, Douglas, Howell, Iron, Madison, Oregon, Ozark, Reynolds, Ripley, Shannon, Taney, Texas, Wayne, Webster, Wright

Byers Orchard

Patrick Byers
9135 State HWY Z
Fordland, MO 65652
(417) 767-2439
Products: Honey

Maple Ridge Herbs & Perennials

Katie Godsey
Rural Route 3 Box 3630
Marble Hill, MO 63764
(573) 866-3639 phone
(573) 866-3475 fax
fang@clas.net

Southeast: Butler, Cape Girardeau, Dunklin, Mississippi, New Madrid, Pemiscot, Scott, Stoddard

Livingston Berry Farms

Products: Honey

Floyd Livingston 3889 HWY 53 Poplar Bluff, MO 63901 (573) 686-1605 livfarms@hotmail.com Products: Honey

Your Neighbor's Honey

Ray Nabors
1612 HWY 162
Portageville, MO 63873
(573) 379-5431
naborsr@missouri.edu
Products: Comb honey

Special Note: STATE APICULTURE

SPECIALIST

Southwest: Barry, Barton, Christian, Dade, Greene, Jasper, Lawrence, McDonald, Newton, Stone

Amos Apiaries

Jann Amos
Webb City, MO 64870
1-800-279-6468
Products: Honey, bees, hive supplies, and pollination services

Farm of Hard Rocks

Leah R. Bonebrake 3175 E. State HWY AA Springfield, MO 65803 (417) 833-9180 phone (417) 833-9187 fax Products: Honey

Special Note: Also sells organic produce, eggs, and nature crafts

Fassnight Creek Farms

Dan Bigbee 1366 South Fort Springfield, MO 65803 (417) 865-4186 Products: Honey

Hallam's, Inc.

Robert Zoppelt 505-26 West Daniels Street Ozark, MO 65721-8942 (417) 581-3786 phone/fax rzkozark@yahoo.com Products: Honey

Honey Bee Farms

Carl and Esther Carnahan
109 Schimm Circle
Carl Junction, MO 64834
(417) 623-1873
honeybfarm@hotmail.com

Products: Honey, beeswax candles, bees,

and pollination services

Southwest cont.

Lindeman Orchards

Gary F. Lindeman
19667 Lawrence 1230
Marionville, MO 65705
(417)258-2859
able@sofnet.com
Products: Honey

Ozark Mountain Orchard

Kathleen Lais
135 Orchard Lane
Highlandville, MO 65669
(417) 443-3343
(417) 886-8247
pr_lais@aol.com
Products: Honey

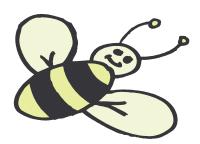
West: Bates, Cass, Cedar, Henry, Jackson, Johnson, Lafayette, St. Clair, Vernon

B & R Honey Farm

BillTerill
9401 S. Hardsaw Road
Lone Jack, MO 64070
(816) 697-3434
Products: Honey and bees

Baxter's Orchards

William Baxter
28522 South Kauffman Road
HWY 7 and T Junction
Garden City, MO 64747-9430
(816) 862-8532
Products: Liquid, Comb and Creme honey



Bell Hill Honey

Glenn Davis 4618 HWY Z Bates City, MO 64011 (816) 690-8007

Products: Honey, beeswax, bees, and

pollination services

Busy Bee Acres

Bob and Liz Harrison 13046 HWY U Odessa, MO 64076 (816) 230-5424

busybeeacres@discoverynet.com Products: Liquid, Comb, and Creme

Products: Liquia, Comb,

honey

Osage Pecan

Vicki Grant
909 West Fort Scott
Butler, MO 64730
1-800-748-8305
(660) 679-6255 fax
osage_pecan@yahoo.com
Products: Honey

Sibley Orchards

Pat Farrell 4121 California Avenue Sibley, MO 64088-9506 (816) 650-5535 Products: Honey

There are over 200,000 beekeepers in the United States

An apiary is where several bee colonies (hives) are kept.

Additional Resources

Additional dealers for package bees, nucs, and/or honeybee queens Golden Colony Honey Farm Ermo Balough 6897 SE Isley Drive Holt, MO 64048 (816) 320-3182

Cantrell Bee and Honey Farm 524 Meramec Station Road Valley Park, MO 63088 (314) 825-2846

Creech Beekeeping Supply Marshall Creech 1124 Weidman Road Town and Country, MO 63017 (314) 878-2750

STATE ENTOMOLOGIST
Mike Brown
PO BOX 630
Jefferson City, MO 65102
(573) 751-5505
Mike Brown@mail.mda.state.mo.us

STATE APIACULTURE SPECIALIST
Ray Nabors
PO BOX 160
Portagville, MO 63873
(573) 379-5431
naborsr@missouri.edu

MO STATE BEEKEEPERS ASSN.

President-Art Gelder
6800 Kirchner Road
Columbia, MO 65202
(573) 474-8837

Walkabot@midamerica.net

Published by:
Missouri Department of Agriculture
Market Development Division
PO BOX 630
Jefferson City, MO 65102
(573) 751-4339
mtdevdiv@mail.mda.state.mo.us